



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/075,264	02/15/2002	Chaucer Chiu	P67612US0	9112

136 7590 03/15/2005

JACOBSON HOLMAN PLLC  
400 SEVENTH STREET N.W.  
SUITE 600  
WASHINGTON, DC 20004

EXAMINER
----------

JELINEK, BRIAN J

ART UNIT	PAPER NUMBER
----------	--------------

2615

DATE MAILED: 03/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Wlt

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/075,264	CHIU ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Brian Jelinek	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 4, and 7-11 is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6 and 12 is/are rejected.
- 7) ☒ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

### **DETAILED ACTION**

This is a first office action in response to application no. 10/075,264 filed on 2/15/2002 in which claims 1-12 are presented for examination.

#### ***Claim Objections***

Claim 11 is objected to because of the following informalities: there is insufficient antecedent basis for the limitation in the claim. Claim 11 recites the limitation "the step of figuring out a gray histogram for the updated image", there is no mention of a gray histogram in claim 6 from which claim 11 depends. Appropriate correction is required

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

**Claims 1-3, and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Yaroslavsky (U.S. Pub. No. 2003/0118245).**

Regarding claim 1, Yaroslavsky discloses a focusing method for a moving object which utilizes a photographic instrument to take images of a moving object, and focuses said photographic instrument by means of a pattern matching method, comprises the following steps: set an optimal matching pattern position (Fig. 3, element 220); retrieve

a serial image of said moving object (Fig. 3, element 230); acquire an initial pattern of said moving object and an initial pattern position according to said serial image (Fig. 3, element 240); and compare said initial pattern position and said optimal matching pattern position (Fig. 3, element 240) so as to make an adjustment in the photographic angle of said photographic instrument (Fig. 3, element 250).

Regarding claim 2, Yaroslavsky discloses the optimal matching pattern position is the focus of said photographic instrument (Fig. 3, element 220).

Regarding claim 3, Yaroslavsky discloses the optimal matching pattern position is around the focus of said photographic instrument (Fig. 3, element 220).

Regarding claim 5, Yaroslavsky discloses the adjustment of said photographic angle is the conversion of the difference between said initial pattern position and said optimal matching pattern position into the adjusted photographic angle of said photographic instrument (Fig. 3, element 250).

**Claims 6 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee (U.S. Pat. No. 6,507,366).**

Regarding claim 6, Lee discloses a focusing method for a moving object which utilizes a photographic instrument to take images of a moving object, and focuses said photographic instrument by means of a pattern matching method, comprises the following steps: retrieve a serial image of said moving object (Fig. 3A, element 330); acquire an initial pattern of said moving object and an initial pattern position according to said serial image (Fig. 3A, element 330); carry out pattern

matching and search for an optimal matching position of said moving object according to said serial image (col. 3, lines 37-40); acquire an updated pattern and an updated pattern position of said moving object according to said optimal matching position (Fig. 3A, element 340); and make an adjustment in a photographic angle of said photographic instrument according to said updated pattern position (Fig. 3, element 360), where the photographic angle is the pan and tilt of the camera.

Regarding claim 12, Lee discloses the adjustment of said photographic angle is the conversion of the difference between said initial pattern position and said updated pattern position into said adjusted photographic angle (Fig. 3, element 360).

***Allowable Subject Matter***

**Claims 4, and 7-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.**

Regarding claim 4, the reason for allowance is as follows: the prior art does not disclose or fairly suggest a focusing method for a moving object which utilizes a photographic instrument to take images of a moving object, and focuses said photographic instrument by means of a pattern matching method, wherein acquisition of an initial pattern comprises the following steps: figure out a gray histogram of said image; figure out a histogram projection drawing of said image; and acquire said initial pattern and said initial pattern position according to said gray histogram and said histogram projection drawing.

Regarding claim 7, the reason for allowance is as follows: the prior art does not disclose or fairly suggest a focusing method for a moving object which utilizes a photographic instrument to take images of a moving object, and focuses said photographic instrument by means of a pattern matching method, wherein the pattern matching is carried out according to the comparison between said initial pattern and the image of said serial image.

Regarding claim 8, the reason for allowance is as follows: the prior art does not disclose or fairly suggest a focusing method for a moving object which utilizes a photographic instrument to take images of a moving object, and focuses said photographic instrument by means of a pattern matching method, wherein the determination of said optimal matching position is based on the comparison between said initial pattern and the image of said serial image, so as to decide that the image of said serial image would represent the pattern position of said moving object.

Regarding claim 9, the reason for allowance is as follows: the prior art does not disclose or fairly suggest a focusing method for a moving object which utilizes a photographic instrument to take images of a moving object, and focuses said photographic instrument by means of a pattern matching method, comprising the following steps: figure out a gray histogram of said image; figure out a histogram projection drawing of said image; and acquire said initial pattern and said initial pattern position according to said gray histogram and said histogram projection drawing.

Regarding claim 10, the reason for allowance is as follows: the prior art does not disclose or fairly suggest a focusing method for a moving object which utilizes a

photographic instrument to take images of a moving object, and focuses said photographic instrument by means of a pattern matching method, comprising the following steps: figure out a gray histogram of said updated image; figure out a histogram projection drawing of said updated image; and acquire said updated pattern and said updated pattern position according to said gray histogram and said histogram projection drawing.

Regarding claim 11, the reason for allowance is as follows: the claim depends from an allowable base claim.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Jelinek whose telephone number is (571) 272-7366 thereafter. The examiner can normally be reached on M-F 8:00 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Groody can be reached at (571) 272-7950. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

Application/Control Number: 10/075,264  
Art Unit: 2615

Page 7

you have questions on access to the Private PAIR system, contact the Electronic  
Business Center (EBC) at 866-217-9197 (toll-free).

Brian Jelinek  
3/8/2005



TUAN HO  
PRIMARY EXAMINER